

### Claims

1. In a method of applying a coating including a finely powdered, wear resistant alloy to a surface area of a cast iron part in order to produce a coated area having increased wear, the method including the steps of:

(a) decarburizing at least said surface area of said cast iron part to an effective depth;

(b) coating said surface area of the cast iron part with said finely powdered, wear resistant alloy; and

(c) fusing said coating by heating said cast iron part together with said coating to a temperature below the melting point of said cast iron part but sufficient to cause said alloy of said coating to fuse.

2. The method of applying a coating, as defined in claim 1, wherein said coating is applied by a slurry coating process.

3. The method of applying a coating, as defined in claim 2, wherein said effective depth is about 0.25 mm.

4. The method of applying a coating, as defined in claim 2, wherein said effective depth is between about 0.25 mm and 0.5 mm.

5. The method of applying a coating, as defined in claim 1, wherein said coating is applied by a thermal spray process.

6. A method of applying a coating, including at least one of a wear resistant or corrosion resistant alloy, to a cast iron part comprising the steps of:

(a) decarburizing an area of said cast iron part which is desired to be coated with said coating; and

(b) applying said coating to said area of said cast iron part by a process resulting in said coating adhering to said cast iron part.